

APR2 Status for Sep 7 - Post flight

Submitted by **sveleva** on Tue, 09/14/2010 - 11:59

- **APR-2**
- **Gaston**

Flight Date:

Tuesday, September 7, 2010

Sortie Number:

10-06-16

DC-8, with APR2 on board, flu through PGI38 (ex-Gaston) on September 7, 2010, taking off from St. Croix and returning to Ft. Lauderdale.

The system was very active when DC8 started flying a square spiral, sampling the environment before entering the precipitating system(see ttached image of the flight track). The detected lightning was as much, or even more intense than during the first convective burst (Sept. 1st) during which the Overshooting Tops (OT) were very impressive.

The original flight pattern was modified because we could not fly through the very active part of the storm. As we were sampling the environment, the convection started to die down rapidly. When DC8 flu through the previously active area about two hours later. APR2 found deep and intense stratiform cloud (see the attached images). DC8 sampled the stratiform area, flying an ellipse. The following images show the 14 GHz radar reflectivity on the two passes that were oriented SE-NW. The intense reflectivity at mid levels , known as the “bright band”, is indicative of the stratiform nature of the precipitation.

There was some active convection on the NW side of the system which we saw as we were exiting it. The isolated deep reflectivity core in the second image is representative of this area.

APR2 worked very well. The real-time display enabled the mission scientist to monitor the precipitation as we were flying through the system.

Status:

Green

Images
